Site/Facility or Building	Structural Description	Distance to Site Boundary (Kilometers)	Vintage	Original Mission	Current Use	Operational Status	Unique Characteristics	Authorization Basis
Oak Ridge Y-12 Plant								
Buildings 9119/9983/9710-3	Steel and wood	0.305	1990/40/70	Office building	Office buildings containing HEU sources	In use	None	Various documents, 1994
Building 9204-2/2E	Reinforced concrete	0.4	1971	Assembly, quality operations, disassembly, & lithium operations	Same	Operating	None	OSR, 1995; SAR, 1991
Building 9204-4	Structural steel and concrete	0.37	1943	Metal working operations	Metal working operations & HEU storage	Operating	Small portion of building used for HEU	SAR, 1991; OSR, 1995
Buildings 9206/9720-17	Structural steel frame and hollow clay tile	0.4	1943	Chemical recovery of HEU<97%	Storage of in-process material	Standdown	None	FSAR, 1984; OSR, 1993
Building 9212	Structural steel frame and hollow clay tile	0.15	1942	HEU chemical recovery & metal casting	Same	Standdown	None	FSARs & OSRs, 1983 - 1993
Buildings 9215/9998	Structural steel frame	0.225	1956	Fabrication of EU	Storage & handling of EU; nuclear weapons dismantlement; fabrication of metal shapes	Standdown	Large-scale HEU metal working facility	FSAR & OSRs, 1991
Building 9720-12	Steel frame	0.4	1942	Storage	Storage of in-process material	In use	None	BIO, 1996
Buildings 9720-5/9201-5	Wood frame/concrete	0.34	1944	Warehouse for weapons related materials and IAEA vault	Same	Operating	Wood frame construction	FSAR, 1985;
Building 9995	Structural steel frame and hollow clay tile walls	0.275	1962	Analytical chemistry laboratory	Same	Operating	None	None
Rocky Flats Environmental 7	Гесhnology Site							
Building 371	Reinforced concrete	2.14	1980	Plutonium recovery operations	Plutonium storage and waste handling	In Use	Seismically qualified	FSAR, 1981; OSR, 1988
Building 771	Reinforced concrete	1.9	1953	Plutonium recovery operations	Plutonium stabilization	In Use	Highest plutonium vulnerability facility; fire damage 1957	FSAR, 1987; OSR, 1987
Building 707	Reinforced concrete	2.2	1970	Plutonium fabrication	Plutonium stabilization	In Use	ORR - completed for use	FSAR, 1987; OSR, 1995
Buildings 776/777	Cement block	2.2	1957	Plutonium fabrication	Waste storage & handling	Transition	High plutonium vulnerability facility; fire damage 1969	FSAR, 1987; OSRs 1987
Building 779	Reinforced concrete	2.2	1966	Plutonium R&D	Deactivation	Deactivation	Outer walls seismically qualified	FSAR, 1987; OSR, 1987
Building 881	Reinforced concrete	1.75	1952	HEU fabrication	Analytical laboratories; records storage	In use	Built below grade	Draft SAR, 1982
Building 883	Steel frame/concrete	1.9	1957	HEU metallurgy	National conversion pilot project	D&D	National conversion pilot project	Draft FSAR, 1982
Building 886	Reinforced concrete	1.9	1966	Criticality experiments	Deactivation	Transition	Criticality laboratory	BIO, 1995
Building 991	Reinforced concrete	2.2	1952	Shipping and staging SNM	Same	Operating	Concrete tunnel; underground vault	BIO; OSR, 1988
Los Alamos National Labora	atory							
Building TA-3-35	Concrete slab/metal frame	0.2	1953	Nuclear fuel processing;	Pressing operations	Operating	5,000 ton press	Site-wide EIS, 1979
Building TA-3-40	Reinforced concrete	0.2	1954	Calibration of health and safety radiation instrumentation	Same	Operating	None	Site-wide EIS, 1979
Building TA-3-29 (CMR)	Reinforced concrete/ cinder block	1.0	1952	Chemical & metallurgical analysis	Same	Operating	Building as containment barrier	FSAR, 1992;JCO, 1994; BIO, 1995
Building TA-15-183	Reinforced concrete	2.1	1956	Support explosives research & development	Same	Operating	Vault	SA, 1993
Building TA-18	Concrete/slab	0.1 - 1.0	1956	Criticality experiments	Same	Operating	Remotely controlled criticality experiments	SAR, 1995; TSR, 1996
Building TA-35-2	Concrete/slab	0.5	1969	Support building for sodium-cooled reactor	Laboratory for development of non-destructive measurement equipment	In use	Not built to nuclear facility design requirements	Site-wide EIS, 1979
Building TA-35-27	Concrete/slab	0.5	1956	Sodium-cooled reactor containment building	Development and laboratory for nondestructive measurement equipment	In use	Reactor containment housing; two shielded cells and 3 to 6-ft thick shielding walls	SOP, Site-wide EIS, 1979
Building TA-35-207	Steel frame	0.5	1974	Fusion product diagnostic development	Same	Operating	None	Site-wide EIS, 1979

B-2 Highly Enriched Uranium Working Group Report

Table B-1 Facility Summaries

Site/Facility or Building	Structural Description	Distance to Site Boundary (Kilometers)	Vintage	Original Mission	Current Use	Operational Status	Unique Characteristics	Authorization Basis		
Building TA-48-1	Concrete slab	0.1	1957	Radiochemistry	Same	Operating	HEPA filter exhaust systems; lead shielded storage	SOP, BIO, 1996 (in progress)		
Building TA-53-823	Concrete slab	1.0	1976	Storage	Storage	Operating	None	SAR, 1985, Addendum 1987		
Building TA-54-38	Concrete/slab	0.1	1989	Verification assay; radiographic examination	Waste verification and NDA	Standdown	None	Draft SAR, 1996		
Building TA-55	Reinforced concrete	3.0	1978	Plutonium & SNM processing	Same	Operating	Seismically qualified	FSAR Draft, 1995; EIS, 1979; BIO, 1994		
Building TA-59-1	Brick/cement block	0.02	1966	Occupational medicine	Radio-analytical chemistry work for environmental surveillance activities	In use	None	Site-wide EIS, 1979		
Portsmouth Gaseous Diffussion Plant										
Building X326 L-Cage	Siding/panels	0.75	1956	Hazardous waste storage	Same	Operating	None	FSAR, 1985		
Building X-326	Siding/panels	0.75	1956	High enrichment by gaseous diffusion process	Product withdrawal & blending activities	Operating for LEU enrichment	Process equipment	FSAR, 1985		
Building X-345	Reinforced concrete	0.75	1979	SNM storage	Same	Operating	None	FSAR, 1985		
Building X-744G	Siding/panels	0.23	1952	Piping fabrication shop	Storage	In use	None	FSAR, 1985		
Building X-705 "E" Area	Brick/concrete block	0.75	1966	Oxide conversion	Not in use	Inactive	Contaminated - restricted	FSAR, 1985		
Building X-705	Brick/cement block	0.75	1955	Decontamination & recovery facility	Same	Operating	None	FSAR, 1985		
Building X-710	Reinforced concrete	0.35	1953	Analytical laboratory	Same	Operating	Meets criteria for seismic & wind events	FSAR, 1985		
Idaho National Engineerin	ng Laboratory									
CFA-690 RESL	Concrete/slab	8.0	1963	Radiochemical and dosimetry analysis	Same	Operating	None	SAR, 1996		
ICPP-601	Reinforced concrete/steel	13.7	1953	Reprocessing of SNF	Storage	Not operating	Process cell shielding	SRD, 1983		
ICPP-602	Reinforced concrete	13.7	1953	Chemical and radio- chemical analyses	Same	Operating	None	SAR, 1995		
ICPP-627	Reinforced concrete	13.7	1955	Prepare and analyze radioactive samples	Same	Operating	None	SAR, 1995		
ICPP-637	Steel frame/concrete block	13.7	1986	Offices, chemistry laboratories, and experimental facilities	Same	Operating	Criticality alarm system; seismically qualified	SAR, 1995		
ICPP-640/Rover	Reinforced concrete	13.7	1961	Headend reprocessing system for reclaiming HEU	Shutdown	Transition	None	SAR, 1995		
ICPP-651	Reinforced concrete	13.7	1975	Storage & shipping of unirradiated fuel materials	Same	Operating	Halon fire suppression systems; dry-pipe sprinkler system	SAR, 1994; TSR, 1996 (draft)		
ICPP-657	Concrete slab	13.7	1953	Safeguards and security offices	Same	Operating	Source triply contained	SAR, 1994		
ICPP-666	Reinforced concrete	13.7	1985	Fuel storage facility and headend dissolution process	Fuel storage	Operating	Designed for remote operation	SAR, 1995		
RWMC-ASB II	Air support structure	5.6	1990	Waste storage facility	Same	Operating	None	SAR, 1995		
RWMC - ILTSF Pad 2	Steel cargo container	5.6	1985	Waste storage facility	Same	Operating	Stored in open yard with concrete shielding	SAR, 1995		
RWMC - TSA Pad	Earth covered	5.6	1980	Waste storage facility	Same	Operating	None	SAR, 1995		
TRA-603	Steel frame	10.53	1952	Storage vault	Same	Operating	None	SAR, 1993		
TRA-604	Concrete/slab	10.53	1952	Chemical and physics laboratory	Same	Operating	None	SAR, 1993		
TRA-621	Concrete	10.53	1981	Storage, inspection, &NDA of SNM	Same	Operating	Constructed to withstand design basis tornado	SAR, 1992; OSR, 1992		
TRA-670 ATRC	Reinforced concrete	10.53	1964	Obtain nuclear characteristic data on ATR core	Same	Operating	None	SAR, 1993		

B\_4 Highly Enriched Uranium Working Group Report

Table B-1 Facility Summaries

Note	Site/Facility or Building	Structural Description	Distance to Site Boundary (Kilometers)	Vintage	Original Mission	Current Use	Operational Status	Unique Characteristics	Authorization Basis
1905 Novembly Oran   1906 Novembly Oran   1906	· · ·						- F		
	100K Assembly Area	Steel frame	8.2	1954	& stage new fuel assemblies, targets, and	New fuel and metal staging	In use	slug vault seismically qualified	SAR, 1992; TSR 1995; BIO, 1995
Composition	100K Disassembly Basin	Reinforced concrete	8.8	1953	components & prepare irradiated components		Operating	Transfer canal; concrete basin	SAR, 1992; TSR, 1994; BIO, 1995
Part	100L Disassembly Basin	Reinforced concrete	8.8	1953	components & prepare irradiated components		Operating	Transfer canal; concrete basin	TSR, 1995; BIO, 1995
Second	100P Disassembly Basin	Reinforced concrete	7.2	1953	components & prepare irradiated components		Operating	Transfer canals; concrete basin	TSR, 1995; BIO, 1995
10   10   10   10   10   10   10   10	Building 235-F	•	9.4	1955		Storage	In use	qualified; HEPA and/or sand	SAR, 1986; OSR, 1988
Ruiding 73.5.A seed frame/partially herdened of controls statecases of the control of the contro	Building 247-F	Steel frame	10.0	1981		None	Not operating	None	SAR, 1985; OSR, 1988
Sources streams of concrete state of the streams of	Building 321-M	Steel frame	0.75	1957	Fuel fabrication facility	None	Not operating	None	SAR, 1987
Building 772-P Blists resistant/reinforced oncrete Building 773-A Concest/slah 0.64 1954 Research & development remediation waste characterization Building 773-A Concest/slah 0.64 1954 Research & development remediation waste characterization FPI I'me Reinforced concrete Building 773-A Concest/slah 0.64 1954 Research & development remediation waste characterization FPI I'me Reinforced concrete Building 773-A Concest/slah 0.64 1954 Recovery of PU-239 Building 773-A Reinforced concrete Building 773-B Reinforced concrete slab floor Building 773-B Reinforced concrete Building 774-B Reinforced concrete Building 773-B Reinforced concrete Buildi	Building 735-A	* *	0.7	1954	and personnel monitoring	Same	Operating	None	BIO, 1993; OSR, 1993; TSA, 1993
concrete  concre	Building 772-1F	Brick/cement block	9.9	1987	- · · · · · · · · · · · · · · · · · · ·	Support NMSP	In use	NPH resistant	BIO, 1996; SAR, 1987; OSR, 1987
Refunding Reinforced concrete Reinforced concrete Reinforced concrete Reinforced concrete Recovery of PU-239 Recovery of PU-239 Recovery of PU-238 and HeU; HEU Solution storage Remotely operating Remotely operated; external HEU Shar resistant reinforced concrete Remotely and/or sand filtered exhaust an	Building 772-F	, ,	9.8	1954	Analytical laboratory		Restricted	Seismically qualified	SAR, 1992; OSR, 1987
H-Canyon Reinforced concrete; blast resistant HEL and/or sand filtered exhaust blast resistant Pinforced concrete Blast resistant Pinforced and Plast resistant Pinforced Plast Richard Structure with HEPA and/or sand filtered exhaust Richard Structure With HEPA and/or sand filtered exhaust Richard Structure With HEPA and/or sand filtered exhaust Plast Richard Plast Ric	Building 773-A	Concrete/slab	0.64	1954	Research & development	Same	Operating	None	BIO, 1993; OSR 1993; TSA, 1993
Solution storage   Stora	FB-Line	Reinforced concrete	8.8	1955	Plutonium recovery	Plutonium processing & storage	Operating	structure with HEPA and/or sand	SAR, 1988; BIO, 1995; OSR, 1995
REOF Seel frame 9.8 1963 Spent fuel storage Same Operating Concrete basin for offsite spent fuel; non-seismic steel lined basins  Oak Ridge K-25 Gascous Diffusion Plant  Building K-25 Steel frame/concrete slab floor 9.1 1945 Gascous diffusion uranium enrichment facility  Building K-31 Steel frame, concrete slab floor 9.3 1952 Gascous diffusion facility  Building K-1030 Steel frame, concrete slab floor 9.3 1947 Analytical laboratory  Same Operating None FSAR, 1985  Building K-1030 Steel frame, concrete block cell 0.3 1945 Electrical maintenance building Classified Office Building M-1030 Steel frame, concrete block cell 0.3 1954 Radiological decontamination, uranium recovery; metal plating operations  Building K-1423 Concrete slab 60 0.5 1969 Sampling of and transfer between UF, explinders  Building K-1652 Reinforced concrete 0.7 1983 Offices for security force Same Operating Concrete slab floor, Hazard screening, 1991  Building K-1652 Reinforced concrete 0.7 1983 Offices for security force Same Operating Concrete slab floor, Hazard screening, 1991	H-Canyon		11.5	1955	Recovery of PU-239		Operating		SAR, 1995; OSR, 1995
Coak Ridge K-25 Gaseous Diffusion Plant  Building K-25 Steel frame/concrete slab floor 0.1 1945 Gaseous diffusion uranium enrichment facility  Building K-31 Steel frame, concrete slab floors 0.3 1952 Gaseous diffusion facility  Building K-1004A Reinforced concrete 0.3 1947 Analytical laboratory  Building K-1030 Steel frame, concrete block cell 0.3 1945 Electrical maintenance building  Building K-1420 Concrete block, metal frame, concrete slab  Concrete	HB-Line	,	11.8	1986	Plutonium recovery	Pu-238 space mission; HEU recovery	Operating		SAR, 1991; OSR, 1992
Building K-25 Steel frame/concrete slab floor 0.1 1945 Gaseous diffusion uranium enrichment facility  Building K-31 Steel frame, concrete slab floors 0.3 1952 Gaseous diffusion facility  Building K-104A Reinforced concrete  Building K-104A Reinforced concrete  0.3 1947 Analytical laboratory  Analytical laboratory  Electrical maintenance building  Classified Office Building  Classified Office Building  Classified Office Building  Transition  None  None  Hazard screening, 1994; darfs BIO, 1995  FSAR, 1985  FSAR, 1985  FSAR, 1985  Building K-1420  Concrete slab floors  One  Concrete slab  Concrete slab  Concrete slab  Concrete slab  One  Concrete slab floor,  Hazard screening, 1991  Concrete slab floor,  Hazard screening, 1991	RBOF	Steel frame	9.8	1963	Spent fuel storage	Same	Operating		BIO, 1994; TSR, 1994
Building K-31 Steel frame, concrete slab floors 0.3 1952 Gaseous diffusion facility Drum storage of pond waste material In use None Hazard screening; BIO 1995 Building K-1004A Reinforced concrete 0.3 1947 Analytical laboratory Same Operating None FSAR, 1985 Building K-1030 Steel frame, concrete block cell 0.3 1945 Electrical maintenance building Classified Office Building In use None Hazard screening, 1991 Building K-1420 Concrete block, metal frame, concrete slab  Building K-1420 Concrete slab  Building K-1420 Concrete slab  Building K-1420 Reinforced concrete No.5 1969 Sampling of and transfer between UF, cylinders  Building K-1420 Reinforced concrete No.5 1983 Offices for security force Same Operating Operating Concrete slab floor, Hazard screening, 1991									
Building K-1004A Reinforced concrete 0.3 1947 Analytical laboratory Same Operating None FSAR, 1985  Building K-1030 Steel frame, concrete block cell 0.3 1945 Electrical maintenance building Classified Office Building In use None Hazard screening, 1991  Building K-1420 Concrete block, metal frame, concrete slab Concrete Same Concrete slab floor, Hazard screening, 1991  Building K-1423 Reinforced concrete 0.7 1983 Offices for security force Same Operating Concrete slab floor, Hazard screening, 1991	Building K-25	Steel frame/concrete slab floor	0.1	1945		Storage & offices	In use	None	
Building K-1030 Steel frame, concrete block cell 0.3 1945 Electrical maintenance building Classified Office Building In use None Hazard screening, 1991  Building K-1420 Concrete block, metal frame, concrete slab  Building K-1423 Concrete slab  Concrete slab  O.5 1969 Sampling of and transfer between UF <sub>6</sub> cylinders  Building K-1652 Reinforced concrete  O.7 1983 Offices for security force  Electrical maintenance building Classified Office Building In use  None Hazard screening, 1991  For in use  None  Hazard screening, 1991  For in use  None  Hazard screening, 1991  For in use  None  Hazard screening, 1991  For in use  For	Building K-31	Steel frame, concrete slab floors	s 0.3	1952	Gaseous diffusion facility	Drum storage of pond waste material	In use	None	Hazard screening; BIO 1995
Building K-1420 Concrete block, metal frame, 0.2 1954 Radiological decontaminatory tion; uranium recovery; metal plating operations  Building K-1423 Concrete slab 0.5 1969 Sampling of and transfer between UF <sub>6</sub> cylinders  Building K-1652 Reinforced concrete 0.7 1983 Offices for security force Same Operating Concrete slab floor, Hazard screening, 1991	Building K-1004A			1947	•		Operating	None	
concrete slab  tion; uranium recovery; metal plating operations  Building K-1423  Concrete slab  0.5  1969  Sampling of and transfer between UF <sub>6</sub> cylinders  Building K-1652  Reinforced concrete  0.7  1983  Offices for security force  Same  Operating  Concrete slab floor, Hazard screening, 1991  Hazard screening, 1991	Building K-1030	<u> </u>				Classified Office Building	In use		Ü
between UF <sub>6</sub> cylinders  Building K-1652 Reinforced concrete 0.7 1983 Offices for security force Same Operating Concrete slab floor, Hazard screening, 1991	Building K-1420		0.2	1954	tion; uranium recovery;	Shutdown	Transition	None	BIO, 1995
	Building K-1423	Concrete slab	0.5	1969		Offices	In use	None	Hazard screening, 1991
	Building K-1652	Reinforced concrete	0.7	1983		Same	Operating		Hazard screening, 1991

B-6 Highly Enriched Uranium Working Group Report

Site/Facility or Building	Structural Description	Distance to Site Boundary (Kilometers)	Vintage	Original Mission	Current Use	Operational Status	Unique Characteristics	Authorization Basis		
Oak Ridge National Laboratory										
Building 3019	Reinforced concrete	0.24	1944	Plutonium separation	National repository for U-233.	In use	None	BIO, 1995; OSR, 1995		
Building 3027	Reinforced concrete	0.2	1980	Shipping; receiving and storage vault	Storage Vault	In use	None	BIO, 1996; Hazard screening, 1993; LCD, 1993		
Building 3036	Butler type	0.2	_	Shipping and receiving of radioactive materials	Same	Operating	None	SOP		
Building 3500	Brick & cement block	0.1	1950	Office, shop, laboratory, & instrumentation development	Same	Operating	None	Hazards screening, 1992		
Building 3508	Reinforced concrete/ butler type	0.1	1952	Alpha isolation laboratory	Office, shop, & laboratories	In use	Residual alpha contamination	Hazard screening, 1992; OSR, 1993		
Building 3525	Brick & cement block	0.2	1965	Handling of high level radioactive materials	Same	Operating	Hot cells	Material control limits; SAR		
Building 4501	Brick & cement block	0.1	1952	High level radiochemistry laboratory	Same	Operating	Hot cells; gloveboxes	Hazard screening, 1992; LCD, 1993		
Building 5505	Brick & concrete block	0.2	1967	Transuranic research laboratory	Same	Operating	Hot cells	BIO, 1996; Hazard screening, 1991; LCD, 1993		
Building 6010	Reinforced concrete	<0.1	1969	Pulsed, intense neutron source for physics research	Same	Operating	Electron linear accelerator for pulsed neutron sources	Hazard screening, 1994; LCD, 1992		
Building 7001A	Concrete block	<0.1	_	Radioisotope vault	Same	Operating	Transitory storage (less than 2 days	Hazard screening, 1991		
Building 7710	Steel frame	1.6	1952	General purpose office, laboratories, and storage	Same	Operating	Metal walls and high ceiling for source storage	Hazard screening, 1991		
Building 7824	Steel frame; corrugated aluminum siding	1.2	1982	Non-destructive assay of waste containers	Same	Operating	None	BIO, 1996; Hazard screening, 1992; LCD, 1992		
Building 7930	Steel frame/concrete block	1.2	1964	Remote fabrication of reprocessed uranium	Various	In use	Heavily shielded hot cells	BIO, 1996; OSR, 1987; 1991 Hazard screening		
Building 9201-2	Brick & concrete	0.7	1949	Calutron facility	Fusion research, offices, shops, & laboratories	In use	None	Hazard screening, 1992		
Building 9204-3	Concrete slab/tile	0.7	1944	Calutron facility	Isotope enrichment	In use	None	Hazard screening, 1992		
Pantex Plant										
Building 12-2, Source Room	Brick/cement block	1.0	1979	General use	Radiological work & administrative type functions	In use	None	SAR, 1995		
Building 12-44, Building 12-85/96, Building 12-98	Reinforced concrete	0.5	1959	Assembly/disassembly cell staging and inspection	Assembly/disassembly cells; pit	In use	Gravel Gertie structures	BIO, 1996; SAR 1981; EIS 1983		
Building 12-58 (Bays 4 & 5), Building 12-60 (Bays 3, 4, and 5)	Reinforced concrete	0.5	1966	Low hazard high explosive storage; mass properties test facility	Staging of CSAs	In use	Meets explosive safety requirements	BIO, 1996		
Building 12-64; Building 12-84; Building 12-99; Building 12-104	Reinforced concrete; blast resistant	0.5	1970	Nuclear explosives assembly/ disassembly, examination, testing and interim storage and staging	Same	Operating	Designed to prevent explosion propagation	BIO, 1996; EIS, 1983		
Zone 4 Magazine	Earth covered	5.4	1963	Interim storage or staging of nuclear explosives	Same	Operating	Metal arch constructed of corrugated, galvanized steel panels	FSAR, 1992; EIS, 1983; BIO, 1996		
Sandia National Laboratories,										
ACRR Storage Vaults	Reinforced concrete	0.2	1953	Research	In-pile experiment isotope	In use	High bay; vault holes; floor storage			
Building 819 Storage Facility	Brick/cement block	1.0	1971	Storage vault	Same	Operating	None	No authorization basis required		
Nuclear Material Storage Facilities	Reinforced concrete	5.4	1949	Component storage	Storage of radioactive materials	In use	Bored into mountain; non-DOE landlord	BIO, 1996		
Radiation Metrology Laboratory	Brick/cement block	5.4	1981	Measurement services and experiment support	Radiation dosimetry	In use	None	No authorization basis required		
SPR Facility	Reinforced concrete	5.4	1971	Testing & research	Test reactors	In use	Above ground concrete Kiva reactor operating area; rail track access to Kiva area	SAR, 1995		

B\_8 Highly Enriched Uranium Working Group Report

Table B-1 Facility Summaries

Site/Facility or Building	Structural Description	Distance to Site Boundary (Kilometers)	Vintage	Original Mission	Current Use	Operational Status	Unique Characteristics	Authorization Basis	
Argonne National Laboratory - West									
Building 704 - Fuel Manufacturing Facility	Reinforced concrete	4.8	1987	Housing binary fuel manufacturing equipment	Fuel material storage	In use	Vault	SAR, 1986	
Building 720 - Transient Reactor Test Facility	Reinforced concrete	6.4	1958	Test reactor	Same	Shut down	Air cooled reactor	FSAR, 1993	
Building 752 - Analytical Laboratory	Concrete	4.8	1966	Chemical, radiochemical & physical measurement	Same	Operating	Hot cells	SAR, 1993	
Building 765 - FCF - Fuel Conditioning Facility	Reinforced concrete	4.8	1964	Recycle EBR fuel	Conditioning EBR fuel for final disposition	In use	Air and argon hot cells	SAR, 1993	
Building 775 - Zero Power Physics Reactor, Workroom/Vault	Reinforced concrete	4.8	1970	Critical assembly testing	Storage vault	In use	Vault	SAR, 1992; SAD, 1980	
Building 785 - HFEF - Hot Fuel Examination Facility	Reinforced concrete	4.8	1975	Prepare & examine irradiated fuel	EBR II fuel storage & waste preparation	In use	Steel liner in hot cells; argon atmosphere	SA, 1991; SAR, 1975; OSR, 1985	
EBR-II	Reinforced concrete	4.8	1960	Experimental breeder reactor	In process of defueling	Not operating	Inert cover gas; sodium-cooled reactor with confinement	Safety Document 1987; TSR, 1996; HA-EBRII	
RSWF - Radioactive Scrap and Waste Facility	Burial ground	5.6	1966	Waste storage	Same	Operating	Upgraded with cathodically protected liners	SAR; SA	
Lawrence Livermore Nationa	l Laboratory								
Buildings 151, 177, 194, 241, 255	Various	0.4	Various	Laboratory	Same	Operating	None	None	
Building 231	Concrete	0.4	1960	Storage; shipping; receiving	Same	Operating	None	Draft SAR, 1994	
Building 332	Reinforced concrete	0.35	1961	Plutonium research & development	Same	Operating	Inert glove boxes; building as confinement barrier for DBE & DBT	SAR, 1995; TSR	
Building 251	Reinforced concrete	0.6	1956	Heavy element R&D	Scheduled for D&D	In use	None	SAR, 1995	
New Brunswick Laboratory									
Building 350 - Non-destructive assay (NDA) Laboratory	Concrete blocks	0.4	1950	Plutonium fuel fabrication and plutonium material storage	Nondestructive assay measurements	Operating	None	SAR, 1990; Draft SAR, 1995	
Building 350 - Pu Labs #193 & # 199	Concrete blocks	0.4	1950	Plutonium fuel fabrication and plutonium material storage	Plutonium chemistry & measurements	Operating	None	SAR, 1990; Draft SAR, 1995	
Building 350 - Pu Storage Vaults 119, 125, 131 & 137	Steel box liner/reinforced concrete vault	0.4	1950	Plutonium material storage	Nondestructive assay measurements	Operating	None	SAR, 1990; Draft SAR, 1995	
Building 350 - Storage room C169	Metal studs and drywall	0.4	1977	Uranium material storage	Plutonium chemistry & measurements	Operating	None	SAR, 1990; Draft SAR, 1995	
Building 350 - Uranium Labs C106, C126, C146, C158, D110, C218, C230, C234 & C250	Concrete blocks	0.4	1977	Uranium chemistry & measurements	Same	Operating	None	SAR, 1990; Draft SAR, 1995	
Building 350 - Uranium Storage Rooms C068 & C068A	Reinforced concrete/ Concrete blocks	0.4	1977	Uranium material storage	Same	Operating	None	SAR, 1990; Draft SAR, 1995	
Argonne National Laboratory	- East								
Building 200	Brick/cement block	0.425	1951	Research and development	Chemistry laboratory	In use	Hot cells	Safety and Ops. Manual, 1994	
Building 205	Concrete block/brick	0.68	1950	Nuclear fuel research & development	Energy sciences	In use	Shielded cells	BIO, 1993; SAR draft, 1995	
Building 206	Brick/concrete	0.3	1961	Reactor experiments	Storage; nuclear reactor safety experiments	In use	None	None	
Building 208	Brick	0.3	1961	Reactor experiments	Equipment storage; laboratory	In use	None	ANL-E ES&H Manual	
Building 212	High density concrete	0.67	1964	Fuel and material research & development	Hot cells; SNF storage	In use	Hot cells; nitrogen environment	OSRs, 1982; BIO, 1993; Draft SAR, 1996	
Building 306	Steel frame	1.0	1951	Radioactive waste handling	Radioactive waste handling	Operating	None	BIO, 1993; Draft SAR, 1996	
Building 315	Reinforced concrete	0.2	1964	Store SNM for ZPPR	SNM storage, receiving, & shipping	Operating	Emergency pressure relief system	Crit. Safety Eval., 1995; Hazard Analysis, 1995	
Building 360	Concrete slab	0.6	-	Source storage	Same	Operating	Radiologically controlled areas;	ANL-E ES&H Manual	

B–10 Highly Enriched Uranium Working Group Report

Site/Facility or Building	Structural Description	Distance to Site Boundary (Kilometers)	Vintage	Original Mission	Current Use	Operational Status	Unique Characteristics	Authorization Basis
							below grade	
Building 362	Concrete slab	0.6	-	Source storage	Same	Operating	Radiologically controlled areas; below grade	ANL-E ES&H Manual
Building 375	Metal siding, concrete slab	0.6	1980	Part of intense pulsed neutron source (IPNS)	Storage	Operating	None	IPNS SAR, 1994
Pacific Northwest National L	aboratory							
Building 318	Reinforced concrete	1.6	1967	HTLR reactor	Calibration and dosimeter offices	In use	Photon facility	Facility Use Agreement, 1996
Building 324	Reinforced concrete	1.6	1966	PRTR reactor fuel processing	Radiochemical processing/ metallurgical engineering	In use	Stainless steel lined hot cells	Draft SAR, 1992
Building 325	Reinforced concrete	1.6	1953	Nuclear R&D laboratory	Analytical and process research	In use	Hot cells	Draft SAR, 1992
Building 329	Reinforced concrete	1.6	1953	Environmental and bioassay laboratory	Chemical sciences laboratory	In use	Neutron multiplier facility	Facility Use Agreement, 1996
Building 3720	Reinforced concrete	1.6	1960	Plutonium processing	Material science research	In use	None	Facility Use Agreement, 1996
Building 320	Concrete/steel frame	1.6	1966	Radiochemistry laboratory	Very low level radiochemistry laboratory	Operating	None	Facility Use Agreement, 1996
Hanford Site								
222-S Laboratory	Reinforced concrete	6.5	1951	Analytical laboratory	Same	Operating	None	ISB, 1996; JCO, 1995
FFIF	Reinforced concrete	16.1	1978	Reactor facility	Standby	Not Operating	State-of-the-art sodium cooled reactor	SAR, 1996; TSR; CSE
PFP Vaults	Reinforced concrete	25	1949	Plutonium processing	Interim storage of plutonium and HEU	In use	Instrumented storage racks	TSR; FSAR 1991
Brookhaven National Labora	, , , , , , , , , , , , , , , , , , ,							
HFBR New Fuel Vault	Reinforced concrete	1.2	1980	Storage for new fuel	Same	Operating	None	SAR, 1996; TSR; CSE
Spent Fuel Canal	Reinforced concrete	1.2	1965	Interim storage of spent fuel	Same	Operating	None	SAR/TSR, 1996
SNM Vault	Reinforced concrete	1.2	1980	Storage for special nuclear material	Same	Operating	None	SAR, 1996; CSE
Nevada Test Site	Steel/reinforced concrete/	10.0	1966	Pana aumanimantal maaatan	S + 0 # 0 @ 0	D&D	Concrete access tunnel	Unknown
Super Kukla Reactor Facility	partly earth covered			Bare experimental reactor	Storage			
Atlas Facility	Reinforced concrete	0.03	1981	Instrumentation development	Same	Operating	None	N/A
RAMATROL Facility	Reinforced concrete	5.0	1956	Handling & storage of radioactive sources	Radiological surveys	In use	Sub-floor storage vaults with concrete covers	Unknown
Remote Sensing Laboratory	Concrete block	N/A	1991	Location & retrieval of nuclear devices; emergency response	Same	Operating	None	N/A
Washington Aerial	Brick/ steel butler	N/A	1976	Location and retrieval of	Same	Operating	None	N/A
Measurements Office Mound Plant				nuclear devices				
Building 59	Concrete block	0.28	1977	Radiography	Temporary storage of HEU fuel plates	Shutdown	None	SAR, 1976; OSR, 1990
T-Building Vaults	Five story underground/	0.2	1947	Weapons support program	Storage of uranium and plutonium	In use	None	SAR, 1984; TSR, 1995; BIO, 1995;
	4.87m thick concrete				0.00-10-0 or manner t-110-110-110-110-110-110-110-110-110-11		1.0-10	EIS, 1979; JCO, 1996
Ames Laboratory Alpha-Operations	Concrete block	0.23	1978	Experimental evaluation	Experimental evaluation & transuranic	Not operating	Remodeled 1993	SAR, 1994
Bettis Atomic Power Laborate		0.23	1978	Experimental evaluation	trace analytical research	Not operating	Remodeled 1993	5/AR, 1994
G-Building	Reinforced concrete vault	0.175	1961	Unirradiated fuel processing	Same	Operating	Gloveboxes with argon and	SAR, 1995; Safety Assessment
J							nitrogen atmospheres; vault	Document, 1990
L-Building	Steel frame	0.07	1971	Irradiated fuel handling & storage	Same	Operating	Inert atmosphere & negative pressure gloveboxes	SAR, 1995
Material Evaluation Laboratory	Brick/cement block	0.2	1961	Irradiated fuel processing	Handling and processing of irradiated non-fuel items; storage	Operating	25 hot cells; D&D underway	Nuclear Safety Analysis, 1994; SA, 1990
Naval Reactors Facility-Idaho	Steel frame /reinforced concre	ete 8.7	1956	Examining & testing of Naval SNF	Same	Operating	None	SAR for ECF, 1991

B–12 Highly Enriched Uranium Working Group Report

Table B-1 Facility Summaries

Site/Facility or Building	Structural Description	Distance to Site Boundary (Kilometers)	Vintage	Original Mission	Current Use	Operational Status	Unique Characteristics	Authorization Basis		
Knolls Atomic Power Laboratory										
ATD Laboratory	Concrete block	0.1	1956	NDA	NDA	Operating	Mass and geometry controls	Nuclear Safety Procedures Manual, 1996; Nuclear Criticality Safety Manual, 1996; SAR, 1990		
CDL Laboratory	Cement/metal wall	0.1	1956	Chemical and ceramic processing	Same	Operating	Metal walls	Nuclear Safety Procedures Manual, 1996; Nuclear Criticality Safety Manual, 1996; SAR, 1990		
Chemical Analysis Laboratory	Reinforced concrete/ steel frame	0.15	1956	Chemical analysis	Same	Operating	Service tunnel	Nuclear Safety Procedures Manual, 1996; Nuclear Criticality Safety Manual, 1996; SAR, 1990		
Nuclear Materials Storage Facility	Reinforced concrete	0.12	1991	Receipt, storage and shipping of radioactive material	Same	Operating	Storage vault	Nuclear Safety Procedures Manual, 1996; Nuclear Criticality Safety Manual, 1996; SAR, 1990		
Radioactive Materials Laboratory	High density reinforced concrete	0.17	1956	Radioactive material evaluation	Same	Operating	Hot cells constructed of high density magnetite concrete walls and ceiling	Nuclear Safety Procedures Manual, 1996; Nuclear Criticality Safety Manual, 1996; SAR, 1990		

BIO - Basis for Interim Operations

CLAB - Central Laboratories

CSA - Canned Sub-assembly

DWPF - Defense Waste Processing Facility

EIS - Environmental Impact Statement

EU - Enriched Uranium

HS - Hazard Screening

HTLTR - High Temperature Lattice Test Reactor

IPNS - Intense Pulsed Neutron Source

LCD - Limiting Condition Document

NDA - Non-destructive Assay

NMSP - Nuclear Materials Stabilization Program

SNM - Special Nuclear Materials

SOP - Standard Operating Procedures

SRD - Safety Review Document

TS - Technical Specification

TSA - Technical Safety Analysis

B–14 Highly Enriched Uranium Working Group Report